

Installation and User's Manual

GF1082 V2.0.1



Sr. Starter Kit – SR100B

www.PipeBurstPro.com
800-246-LEAK (5325)

Congratulations on your new PipeBurst Pro Automatic Water Protection System!

Please visit www.PipeBurstPro.com for new component and troubleshooting information.

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Installation

I. Tool Requirements

- These tool requirements assume the TickerValve is already installed by an authorized PipeBurst Pro Dealer or a licensed plumber.
- Electric drill, drill bits, and screwdriver tips to mount the devices.
- Philips #1 or #2 hand screw driver.

II. Mounting & Initial Startup Instructions

- **EXTREMELY IMPORTANT:** INSTALL TICKERVALVE AFTER ALL FIRE SUPPRESSION LINES THAT MAY BE IN PLACE FOR THE FACILITY.

1. Use an authorized PipeBurst Pro dealer or a licensed plumber to install the TickerValve in the building. Ensure proper placement of the valve, we recommend placing this on the water main coming into the building for whole building protection.



Common TickerValve Installation

2. Position the VIP Sr. (Valve Interface Panel Sr.)
 - Verify that the TickerValve wires, SideKick, and the AC adapter will reach the VIP Sr., floor, and AC outlet respectively.
 - For best performance keep the VIP Sr. antenna 24 inches away from big metal objects such as a security or electrical panel.
3. Hold the VIP Sr. to the wall and mark the 2 mounting holes on wall, then attach the VIP Sr. to wall with proper mounting hardware (not included).
4. Remove front faceplate from VIP Sr. by unscrewing the 4 front screws and allow it to hang via the strain relief.
5. If a Secondary TickerValve is going to be installed wire it to the terminals on the main PCBA labeled “FREEZE VALVE”. Wiring Diagram is below:

| | |
|---------|------------|
| Motor + | Red Wire |
| Motor - | Black Wire |
| Open | Blue Wire |
| Closed | Green Wire |
| Sense | White Wire |

6. Plug the 12V battery into the 4 pin jack inside VIP Sr., labeled “12V BATT (S.L.A.B.)” and set battery inside VIP Sr. case.
 - When battery is plugged in the VIP Sr. lights will flash ALL RED and then ALL GREEN and beep twice. Immediately after lights will be: LED 1 **RED**, LED 2 **GREEN**, LED 3 **OFF**, LED 4 **OFF**, and LED 5 **FLASH RED GREEN**.
7. Faceplate can now be reinstalled. Make sure all wires are tucked inside the case.
8. Plug in AC adapter to standard 120VAC wall outlet.
 - After AC adapter is plugged in, the LED 5 should change to GREEN.

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- Diagram illustrating the main control board connections:
- Radio Board Ribbon Cable Connection
 - SLA Battery Connection
 - SideKick Sensor Connection
 - 18 VDC Input Connection
 - Short To Close Main Valve Terminal Block
 - TickerValve Terminal Block
 - Freeze Valve Terminal Block
 - Alarm Contacts Terminal Block



B. Operation Instructions

1. Button 1 – SYNC DEVICES

| LED Color | Definition |
|-----------------|-------------------|
| Green | Devices Synced |
| Red | No Synced Devices |
| Flash Green | Sync Mode |
| Flash Red | Lost Sync |
| Flash Red Green | Confirm Sync |

a. SYNC MODE:

- ENTER SYNC MODE: Press Button 1 for 2 seconds to enter SYNC MODE release when the VIP Sr. beeps 2 times. After the release LED 1 will begin to FLASH GREEN. The VIP Sr. is now ready to have wireless devices synced. To sync a device tap the red SYNC button on the underside of each device, i.e. FloodBug, FloTrax, or Repeater.
- EXIT SYNC MODE: Tap Button 1 and the VIP Sr. will leave sync mode and return to normal operation OR if no device is synced within 5 minutes the VIP Sr. will timeout of sync mode.

b. UNSYNC DEVICES

- Press Button 1 for 7 seconds, all 5 VIP Sr. LEDs will turn RED and all of the synced wireless devices are cleared from the VIP Sr. memory. During the hold of Button 1 there will be short beeps at 2 seconds, ignore this, continue to hold until it beeps again at 7 seconds.
- If a synced device needs to be removed out of the system. ALL DEVICES must be removed and re-synced. There is no way to remove just a select device. **THIS ACTION CANNOT BE UNDONE!**

2. Button 2 – FREEZE SENSOR

| LED Color | Definition |
|-----------------|-----------------|
| Green | On |
| Red | Off |
| Flash Green | |
| Flash Red | Freeze Detected |
| Flash Red Green | |

a. TURN ON / OFF FREEZE SENSOR:

- Press Button 2 for 2 seconds to turn ON or OFF the FREEZE SENSOR. Factory default is ON.

b. TURN ON / OFF ALARM CONTACT RELAY:

- Press Button 2 for 7 seconds to turn ON or OFF the ALARM CONTACT RELAY. During the hold of Button 2 there will be short beeps at 2 seconds, ignore this, continue to hold until it beeps again at 7 seconds.
- All LEDs will flash GREEN when ON or the LEDs will flash RED when OFF. Factory default is OFF.
- When ON it will trigger the ALARM CONTACT RELAY **every** time the system turns the water on or off. When OFF the ALARM CONTACT RELAY is only triggered on an alarm.

3. Button 3 – WATER ON / OFF

| LED Color | Definition |
|-----------------|-------------|
| Green | On |
| Red | Off |
| Flash Green | |
| Flash Red | Alarm |
| Flash Red Green | Valve Fault |

a. TURN WATER ON / OFF:

- Tap Button 3 to turn ON or OFF the WATER. Factory default is ON.

b. DURING ALARM:

- Tap Button 3 to SILENCE the audible ALARM. Tap Button 3 again to RESET the VIP Sr. ALARM.
- If a hardwired water sensor is wet when trying to reset the system the system will not open the TickerValve. If a wireless water sensor is wet when trying to reset the system, the system will open the TickerValve and then reclose the valve. System sensors MUST be dry to reset the system.

4. Button 4 – SECONDARY TICKERVALVE

| LED Color | Definition |
|-----------------|----------------|
| OFF | No TickerValve |
| Green | On |
| Red | Off |
| Flash Green | Alarm |
| Flash Red | Alarm |
| Flash Red Green | Valve Fault |

a. MODE SELECT:

- **ONLY USE THIS IF A SECONDARY TICKERVALVE IS INSTALLED.**
- Press Button 4 for 2 seconds to enter MODE SELECT.
- There are 6 different modes for MODE SELECT. Factory default is set to Mode #6 as described in the chart below.

b. DURING MODE SELECT:

- Tap Button 4 to move between each mode. To select a desired mode press Button 4 for 2 seconds while the desired mode's LED light flashes.
- See the chart below to learn how each mode operates the Secondary TickerValve.
- If no buttons are pressed for 15 seconds the VIP Sr. will timeout and exit MODE SELECT.

| Mode # | LED Number | Main TickerValve Position | Secondary TickerValve Position |
|--------|------------|---------------------------|--------------------------------|
| 1 | 1 | Open / Closed | Open / Closed |
| 2 | 2 | Open / Closed | Closed / Open |
| 3 | 3 | Open / Closed | Closed / Open (Alarm Only) |
| 4 | 4 | Open / Closed | Open / Closed (Alarm Only) |
| 5 | 5 | Open / Closed | Closed / Open (Freeze Only) |
| 6 | ALL | Open / Closed | No TickerValve |

5. Button 5 – SYSTEM STATUS

| LED Color | Definition |
|-----------------|--------------|
| Green | System OK |
| Red | No Battery |
| Flash Green | |
| Flash Red | System Fault |
| Flash Red Green | No AC Power |

a. REBOOT:

- Press Button 5 for 7 seconds to REBOOT the VIP Sr.
- ALL LEDs will turn OFF during the REBOOT process, and will turn back ON after REBOOT is complete.
- *If there is an alarm or system fault that cannot be reset from tapping the Button 3 please do the REBOOT to attempt to resolve the issue.*

b. FACTORY RESET:

- Press Button 1 AND 5 for 7 seconds to RESTORE the VIP Sr. to the original FACTORY SETTINGS. After 7 seconds the LEDs will ALL light RED and the VIP Sr. will beep once.
- **THIS ACTION CANNOT BE UNDONE!**

C. Integration with Security Systems

1. On the back of the VIP Sr. front panel circuit board there is a terminal block labeled ALARM CONTACTS and another labeled REMOTE SWITCH / ALARM INPUT.
 - a. ALARM CONTACTS – This relay switches when an alarm condition occurs allowing your security system to alert your monitoring service.
 - Normally Open – NO
 - Common – C
 - Normally Closed – NC
 - b. REMOTE SWITCH / ALARM INPUT
 - Short to Close Main Valve (TickerValve) – This feature allows the security system to close the TickerValve when the alarm is set as the user exits the facility.
 - c. These contacts are rated for 1A 24VDC or 1A 120VAC resistive loads.
 - d. Thread the wires from the alarm panel through the lower rear openings of the VIP Sr. case and connect to the ALARM CONTACTS terminal block as required.
 - e. Consult the security system installation instructions, and/or the company that installed the system to best integrate the PipeBurst Pro Sr. with security systems.

II. FloodBug with SideKick

A. Component Description

1. The FloodBug is a wireless water sensor. The SideKick (optional) plugs into the FloodBug making it an additional wireless water sensor. The SideKick cable is 5 feet long.
2. The FloodBug operates on 2 AA batteries or included AC adapter.
 - a. Do NOT place batteries in the FloodBug if it is going to be powered with the AC adapter. Batteries are not for a backup.
 - b. Replace AA batteries annually or replace batteries after the FloodBug has alarmed due to water.
3. When the FloodBug detects water via the gold plated sensor pins or the attached SideKick the FloodBug will produce an audible alarm and send a wireless signal to the VIP Sr. This will tell the VIP Sr. to close the TickerValve and the VIP Sr. will produce a visual and audible alarm.
4. The FCC Label is located inside the battery compartment, visible during the installation and removal of the batteries.
5. FloodBugs will wake up 4 times a day to check proper communication to the VIP Sr. If this operation fails; the VIP Sr. will go into an alarm and LED 1 will FLASH RED for LOST SYNC.



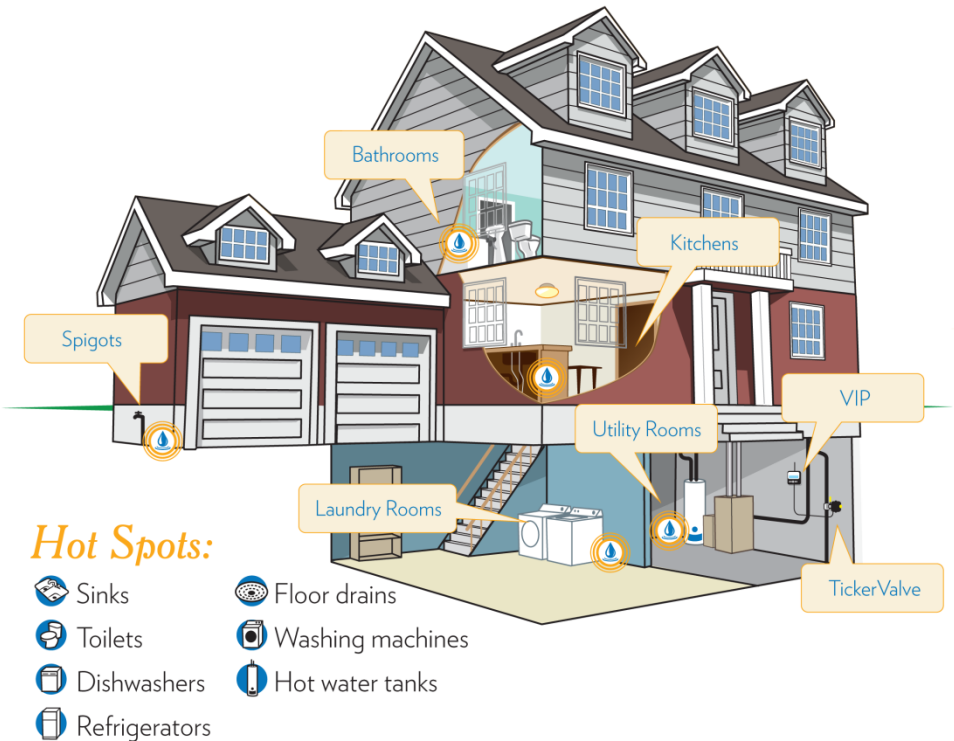
FloodBug with SideKick
Part #: FB100KB

B. Operational Instructions

1. Apply desired power to the FloodBug, either AC power or AA batteries.
2. Place VIP Sr. into SYNC MODE.
3. Tap the red SYNC button on the underside of the FloodBug; it will then produce 3 beeps followed by a succession of beeps followed by 3 long beeps.
 - **Note: The FloodBug must be synced to the VIP Sr. for the system to automatically turn off the water.**
4. Repeat for each FloodBug, when completed exit SYNC MODE on VIP Sr.
5. Place FloodBugs in the desired locations for the install. See Section II.C. (Water Sensor Placement) for considerations and recommendations on this process.
6. Test each synced FloodBug in the final installation location:
 - a. Tap the red SYNC button on the underside of the FloodBug; it will then produce 3 beeps followed by a succession of beeps followed by 3 long beeps. If this happens the FloodBug is within wireless range and is properly communicating with the VIP Sr. If it does not happen a Repeater is needed to extend the signal.
 - b. Or test each FloodBug with water by wetting the sensor.
7. To remove a FloodBug from the system ALL devices must be removed first and the remaining devices must be re-synced.

C. Water Sensor Placement

1. Truly irreplaceable items are not really insurable; insurance policies may replace them with money, which will never capture the real value. With this in mind, it is ultimately up to the user to determine how many FloodBugs is needed and where they should be placed.
2. **Considerations and Recommendations:**
 - a. The exact number and location of FloodBugs installed depends on the desired level of protection, generally, more sensors create a greater coverage area and leads to a quicker response to a potentially damaging leak.
 - b. Remember the FloodBug with a SideKick can potentially cover two leak sources, for example; place the FloodBug under the kitchen sink and the attached SideKick under the dishwasher.
 - c. Place the FloodBug and SideKick near any potential leak source.
 - d. If a specific area of the facility has extreme costs for repair or replacement, or that area contains irreplaceable items, placement of multiple sensors should be considered in this area to stop the water before any damage can occur.
 - e. Water must reach the sensors to activate the system. Consider how level the floor is, and potential water flow paths; then place the sensors accordingly. The system will not have the quick response desired if the sensors are placed on high spots or shielded from the flow of water.
 - f. At a minimum, it is recommended to have one sensor on each facility floor.
 - g. Water detection devices are not recommended for use in high humidity areas.



III. FloTrax

A. Component Description

1. The FloTrax is a wireless remote control.
2. The FloTrax operates on the included AC power adapter only.
3. The FloTrax has 1 LED located above the 1 Button on the front of the device.
 - a. The LED shows the status of the TickerValve. The Button will operate the TickerValve. The Button can also be used to silence the alarm and reset the VIP Sr. from an alarm.
4. The FCC Label is located inside the battery compartment, visible during the installation and mounting of the device.
5. The FloTrax is always awake and checks in 6 times per day. If this operation fails; the VIP Sr. will go into an alarm and LED 1 will FLASH RED for LOST SYNC.
6. The maximum number FloTrax's allowed in a system is 2.



FloTrax
Part #: FT200

B. Operational Instructions

1. Apply AC power to the FloTrax.
2. Place VIP Sr. into SYNC MODE.
3. Tap the red SYNC button on the underside of the FloTrax; it will then produce 1 long beep followed by a succession of beeps followed by 3 long beeps.
 - **Note: The FloTrax must be synced to the VIP Sr. for the FloTrax to operate the PipeBurst Pro Sr.**
4. Repeat for each FloTrax, (Up to 2) when completed exit SYNC MODE on VIP Sr.
5. Place the FloTrax in the desired location for the install; make sure there is AC power in this location.
6. Test each synced FloTrax in the final installation location:
 - a. Tap the red SYNC button on the underside of the FloTrax; it will then produce 1 long beep followed by a succession of beeps followed by 3 long beeps. If this happens the FloTrax is within wireless range and is properly communicating with the VIP Sr. If it does not happen a Repeater is needed to extend the signal.
 - b. Or test each FloTrax by turning the water on or off with the button on the front.
7. To remove a FloTrax from the system ALL devices must be removed first and the remaining devices must be re-synced.

C. Button Operation

1. Tap the Button on the FloTrax to open and close the TickerValve. GREEN light is Water On and RED light is Water Off.
2. During an alarm use the Button to silence the alarm by tapping the button once. Tap it again to reset the VIP Sr. if the water sensors are dry and leak fixed.

D. FloTrax LED Definitions

| LED Color | Definition |
|-----------------|----------------------|
| Green | Water On |
| Red | Water Off |
| Flash Red | Alarm |
| Flash Orange | System Fault |
| Flash Red Green | Valve Status Unknown |

IV. Repeater

A. Component Description

- 1. The Repeater is a wireless range extender.
- 2. The Repeater operates on the included AC power adapter only.
- 3. The FCC Label is located on the bottom side of the device.
- 4. The maximum number of synced Repeaters allowed in a system is 2.



Repeater
Part #: RP100B

B. Operational Instructions

- 1. Apply AC power to the Repeater.
- 2. The Repeater does not have to be synced. Unless you want to double check it is in range by tapping the sync button on the device.

OPTIONAL STEPS (3 to 7)

- 3. Place VIP Sr. into SYNC MODE.
- 4. Tap the red SYNC button on the underside of the Repeater; it will then produce 1 long beep followed by a succession of beeps.
- 5. Repeat for each Repeater, (Up to 2) when completed exit SYNC MODE on VIP Sr.
- 6. Place the Repeater in the desired location for the install; make sure there is AC power in this location.
- 7. Test each synced Repeater in the final installation location:
 - a. Tap the red SYNC button on the underside of the Repeater; it will then produce 1 long beep followed by a succession of beeps. If this happens the Repeater is within wireless range and is properly communicating with the VIP Sr. If it does not happen move the Repeater closer to the VIP Sr.
- 8. To remove a Repeater from the system ALL devices must be removed first and the remaining devices must be re-synced. *UNLESS* the Repeater was not synced in the first place.

Annual Maintenance

I. Cleaning

- A. Annual system cleaning is recommended to ensure proper operation. Cleaning the FloodBugs & SideKicks with a wet towel accomplishes many tasks at once.
- B. The cleaning keeps the gold sense pads free of any dirt, debris, or other material that may inhibit the detection of water.

II. Testing

- A. Annual system testing is recommended to ensure proper operation. Test the wireless devices by tapping the SYNC button on the bottom side of the device.
- B. Replace batteries in all FloodBugs after one year of use.

III. Annual Maintenance Agreement

- A. The local PipeBurst Pro Dealer may offer an Annual Maintenance Agreement to annually perform the above tasks and more. Check with your local PipeBurst Pro Dealer for details.

Customer Support:

GreenField Direct, LLC

14015 238th Street

Greenwood, NE 68366

<http://www.pipeburstpro.com/contact/>

Phone: 800-246-LEAK (5325)

Fax: (402) 944-2907

E-Mail: info@GreenFieldDirect.com

Operating Hours: Monday - Friday, 7:00am - 6:00pm CST (Excludes Major Holidays)

Warranty - PipeBurst Pro Products 7 Year Limited Warranty -

GreenField Direct, LLC of 14015 238th St, Greenwood, NE 68366 ("Warrantor"), warrants to the original purchaser and installed location of the PipeBurst Pro, manufactured by Warrantor, and to any person to whom such originally installed equipment is transferred to via the transfer of said real property that original installation was made, that such equipment shall be free from defects in materials and workmanship during a two (2) year period; additionally the electric valve actuator enclosure and its' electronic components inside, shall be free from interior moisture damage for a period of seven (7) years; both periods commencing upon the receipt of order date for such equipment from the original purchaser thereof; (the "warranty periods"). Product should be registered to be covered by warranty.

Note: Please register the PipeBurst Pro to activate your warranty

<http://www.pipeburstpro.com/support/warranty-registration/>

FCC Compliance Statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Power Requirements:

- For Indoor Use Only (Except TickerValve)
- Requirements for US & Canada
- Use supplied AC Adapter
- Do NOT use AA batteries in FloodBug while using AC power

| VIP Sr. | |
|-------------------------------|----------------------------|
| Input | 100-240V ~50/60Hz 1.0A MAX |
| Output | 18V DC 2.22A |
| FloodBug / FloTrax / Repeater | |
| Input | 100-240V ~50/60Hz 0.2A MAX |
| Output | 5V DC 1.2A |

Notes:

[illegible]

Maintenance Record:

[illegible]



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